Notice of Allowability	Application No.	Applicant(s)	
	10/719,478	SUZUKI ET AL.	
	Examiner	Art Unit	
	Debra Wolfe	3725	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOT OF THE OFFICE OF UPON PETITION BY THE OFFICE OF UPON PETITION BY THE OFFICE OF THE OFFICE O	OR REMAINS) CLOSED in this ap or other appropriate communication GHTS. This application is subject t	plication. If not included n will be mailed in due course. THIS	/e
1. $\boxtimes$ This communication is responsive to <u>Amendment filed Nove</u>	<u>ember 21, 2005</u> .		
2. X The allowed claim(s) is/are <u>1-4,7-10,12 and 14-18</u> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority unda</li></ul>	been received.  been received in Application No cuments have been received in this  of this communication to file a reply ENT of this application.  tted. Note the attached EXAMINER is reason(s) why the oath or declara t be submitted. on's Patent Drawing Review ( PTO a Amendment / Comment or in the ( AMERICAL STATES AMENDED STATES A	national stage application from the complying with the requirements  2'S AMENDMENT or NOTICE OF ation is deficient.  -948) attached  Office action of ings in the front (not the back) of (d).  must be submitted. Note the	
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/06 Paper No./Mail Date	6. ☐ Interview Summary Paper No./Mail Da 7. ☑ Examiner's Amend 8. ☑ Examiner's Statem 9. ☐ Other	ite	

TECHNOLOGY CENTER 3700

**Notice of Allowability** 

## NOTICE OF ALLOWABILITY

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. John Skinner on January 24, 2006.

The application has been amended as follows:

- 1. Delete "claim 1" from claim 4 line 1 and insert --claim 3--
- 2. Delete "a fixed punch projecting from the holding member" from claim 4 line 3 and insert -- the fixed punch--
- 3. Delete "a fixed punch projecting from" from claim 8 line 14
- 4. Delete "claim 7" from claim 16 line 1 and insert --claim 15--
- 5. Delete "a fixed punch projecting from the holding member" and insert
- -- the fixed punch--

## Allowable Subject Matter

The following is an examiner's statement of reasons for allowance.

1. It is the opinion of the examiner that the art of record (considered as a whole) neither anticipates nor renders obvious the following:



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A. a wire rod-forming apparatus "wherein once the shaped part of the wire rod is cut off from the unshaped part movement of the cutting member moves the shaped part toward an end side of the shaft-shaped chute" in combination with the rest of the claimed limitations set forth in claim 1.

B. a wire rod-forming apparatus having "a supply route for compressed air to move the shaped part of the wire rod cut off from the unshaped part to an end side of the shaft-shaped chute" in combination with the rest of the claimed limitations set forth in claim 7.

C. a wire rod-forming apparatus "wherein within the die-cast the punch hole can serve as a supply route for compressed air" in combination with the rest of the claimed limitation set forth in claim 8.

D. a wire rod-forming apparatus having "a rotation table installed in the lower region of the shaft-shaped chute, a plurality of shaft-shaped magazines positioned in the upper region away from the rotation table, and a rotation table controller which rotates the rotation table" in combination with the rest of the claimed limitations set forth in claim 9.

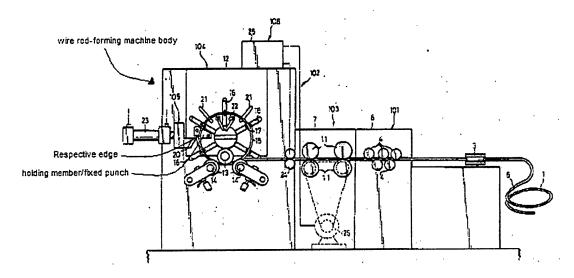
E. a wire rod-forming apparatus having a pair of touch sensors that detect the relaxation of the belt-shaped thereby keeping the belt-shaped wire rod constant between the touch sensors in combination with the rest of the claimed limitation set forth in claim 12.

Further searching by the examiner yielded additional prior art as follows:

2. Yoshioka (U.S. Patent # 4,823,576) discloses an apparatus for manufacturing ring-shaped member from elongate work piece having a wire rod-forming machine body (See FIG below), bending rollers (13) for shaping a wire rod into a ring shape, a cutting member (cutting means 105) having a respective edge (blade 20) that moves in a horizontal direction in the wire rod-



forming machine body and cuts the wire rod therefore separating the shaped part from the unshaped part, and a holding member/fixed punch having a respective edge (See FIG below) is crossed by the cutting member (cutting means 105) and allows the ring to be moved once it is cut by the cutting member (cutting means 105).



Williams (U.S. Patent # 4,335,758) discloses an apparatus for advancing and forming a wire having a forming mechanism (50) consisting of a set of rollers (57,59,61) arranged to produce wire rings (63). Williams also discloses the use of a shaft-shaped chute (cable 69), which is capable of being positioned within the inner side of the wire prior to the winding of the wire, for the purpose of transferring the ring shaped member to a storage area (See FIG 2).

Tipper (U.S. Patent 4,173,235) discloses a method and apparatus for forming wire to noncircular cross sections that teaches the use of pressing rollers (forming rollers 50, 54) for the purpose of pressing a length of wire to a noncircular cross section by using pressing rollers.



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3. However the above cited prior art fails to disclose the limitations of claims 1, 7, 8, 9, 12 stated above in paragraph 1. Therefore, it is concluded that the present invention is allowable subject matter over the prior art. Claims 1-4, 7-10, 12, 14-18 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Wolfe whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 6am - 3:30pm with alternating Fridays 6am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Debra Wolfe Examiner Art Unit 3725

DERRIS H. BANKS SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700